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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,279	12/22/2003	Juan Carlos De La Fuente De Ana	U 014955-3	4478

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EXAMINER

NGUYEN, DANNY

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/743,279	Applicant(s) DE LA FUENTE DE ANA ET AL.	
	Examiner Danny Nguyen	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 11 is renumbered 10,

Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "a gap is recited in claim 1, and other fastener.. recited in new claim 6" as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the

remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 3, 4, 6-9, 11, 14, 15, 17, 19, 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 13, 14, the term "entirely the first side, the exterior surface" is not clear.

Line 17, the phrase "the improvement" is not clear. See 37 CFR 1.75 (e)(2).

Claim 1 also recites a metallic countersunk washer (3) bridges a gap between the fastener and the outer skin. This claimed feature is not clear. There is no where in the drawings shown this feature. Further, is the metallic countersunk washer (3) is the same as a metallic head washer (3) which is described in the specification?.

The "if" term is recited in claims 3, 4, 8, 9, 11-19 is vague.

The new claim 6 recites other fastener in a row with the fastener and a second of the fastener within at least 200 mm of the fastener which raises a new matter because There is nowhere in the specification describes the claimed features.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 8, 9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murciano et al (EP 0976653A1) in view of Andrivet et al (USPN 6,327,132).

4. Regarding claims 1, 2, Murciano discloses in a system for protecting a structure against electrical discharges, the structure (figure 1) comprises an outer skin (EC) of composite having an exterior surface and opposite surface, a metallic internal part (IP) having one side facing the outer skin and another side, and a metallic fastener (R) having a nut (N) on a first end and fastening the outer skin with the internal part, the system comprising a first metallic mesh (1) having a first side and an opposite side substantially of the all of the exterior surface of the outer skin, a second metallic mesh (3) on at least part of the first side of the first metallic mesh, a washer (2) between the nut and another side of the internal part, and an organic finish (OF) that covers the entirely the first side of exterior surface and a second end of the fastener opposite the nut and at the second metallic mesh, the first mesh is thin wire laid up and cured simultaneously with the outer skin, the second mesh (3) is a metallic wire than thicker than the first mesh (1) (see figure) which overlaps the first the first mesh from second end of the fastener (a top surface of E.C, see figure), and has been put by simultaneously with curing of the outer skin and subsequently drilled and countersunk

Art Unit: 2836

for the installation of the fastener , the internal part (IP) is made of metallic material (col. 3, 4, 0015-0016). Murciano does not explicitly show the metallic countersunk washer (rivets R) bridges a gap between the fastener and the outer skin. Andrivet discloses a lightning strike protection structure (see figure 1) comprises the metallic countersunk washer (14) bridges a gap (13) between the fastener and the outer skin. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the countersunk washer of Murciano to incorporate the countersunk with a gap as disclosed by Andrivet in order to dissipate the lightning strike energy. The combination of Murciano and Andrivet do not disclose the second mesh overlaps the first mesh a minimum of 50 mm from second end of the fastener. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select the range to any desired value including a range of 50 mm as long as it compatible with the requirements of other elements in the circuit in order to properly protect structure from the lightning strike condition. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claims 3, 8, 9, 11, Murciano discloses the washer (2) is made of isolating material if the internal part is a composite (col. 3, 4, 0015-0016).

5. Claims 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murciano et al (EP 0976653A1) in view of Andrivet et al (USPN 6,327,132), and Kuras et al (USPN 5,698,316). Murciano and Andrivet do not disclose an isolating ply is disposed between the outer skin and the internal part as claimed. Kuras discloses a

lightning strike protection structure comprises an isolating ply (18) is disposed between the outer skin and the internal part. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the protection structure of Murciano and Andrivet to incorporate the isolating ply as disclosed by Kuras in order to isolate contact between the outer skin and the internal part.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

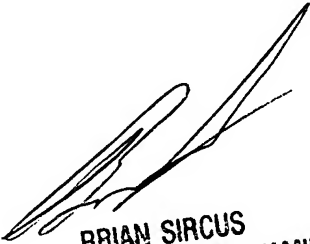
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danny Nguyen whose telephone number is (571)-272-2054. The examiner can normally be reached on Mon to Fri 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571)-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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7/7/2006



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